

REMARKS

Information Disclosure

It is noted that an information disclosure was submitted at the time of the filing of the present application. The 1449 form submitted along with this IDS has not been returned, confirming examiner consideration of the cited references. In viewing the prosecution file on PAIR, the IDS filed on July 2, 2003 is found. However, the copy showing consideration of the cited references is not present. Please return completed 1449 form with the next paper forwarded for this application. (If there is an issue relative to this prior filed IDS, such should be formally identified.)

It is also noted that the present application is a CIP of application No. 10/135,763. This application issued as US 6,938,923 on September 6, 2005.

Claim Amendments

Claims 1-30 were pending at the time of the present office action. Claims 3, 10, 18 and 28-30 have been cancelled herein (without prejudice to their re-introduction in the present application or their inclusion in a continuing application). These claims have been cancelled merely to reduce the number of issues under consideration.

Claim 6 and 15 were indicated in the present action to be allowable. These claims have been amended and are now in independent format, including all of the limitation of the claims upon which the previously depended. As such, these claims are now in condition for allowance.

The remaining independent claims have been amended in response to the objections within the present office action. No new matter has been added. It is respectfully submitted that all claims, as amended, are in condition for allowance.

ARGUMENTS

Claims 1-5, 9, 11, 12 and 14 stand rejected as anticipated by Furukawa US 6,135,222.¹ Claims 10 and 16 stand rejected as obvious in view of Furukawa. Claims 8 and 13 stand rejected as obvious in view of Furukawa and Schaffner et al US 6,129,165.² Claims 17-24 and 26-30 stand rejected as obvious in view of Furukawa and Finch et al US 5,772,237. Finally, claim 25 stands rejected in view of the combination of Furukawa, Finch and Schaffner. It is respectfully submitted that the Furukawa reference does not suggest or disclose the presently claimed invention and that the additional references cited do not further suggest the combination as claimed.

The present invention relates to a power wheelchair having a frame supporting a pair of motor driven drive wheels. At least one ground-engaging idler wheel is connected to the front of the frame and at least one ground engaging anti-tip wheel is mounted on the rear of the wheelchair. The drive wheels, motors and rear anti-tip wheel are supported on a suspension arm that is pivotally attached to the frame. The suspension arm is positioned rearward of the drive wheel. The connection between the anti-tip wheel and the drive wheel is formed such that the torque created by the motor in driving the drive wheels causes a rotation of the suspension arm about its pivot, whereby the anti-tip wheel moves in a direction opposite of the torque to lift the rear anti-tip wheel off the ground (or to otherwise move in response to the applied torque).

The Furukawa reference includes a drive wheel and rear caster wheel structure (31) that is connected to the wheelchair frame at a bracket (28), formed on a rear portion of the wheelchair

1 It is noted that the office action identifies the number of the Furukawa reference as US 6,153,222. This use of this number is believed to be a typographical error, since the patentee for this number is not Furukawa and the subject matter of this patent is not related to power wheelchairs.

2 It is also noted that the office action mistakenly refers to the patentee of US 6,129,165 as "Schaeffner".

frame. The bracket engages a roller 29, which is received in a slot or recess (47) on drive structure and locked by a pivoting hook (52). The rear caster wheel (44) is supported on a bar (40) projected rearwardly from the drive wheel support structure. The bar is contacted by an air damper (26) supported on the wheelchair frame. The air damper buffers the rocking motion of the wheelchair frame with respect to the rear drive structure. See column 4, lines 57-61 and column 8, lines 10-26.

The buffering action of the air damper in Furukawa is not a resilient suspension for the drive wheel or the rear caster wheel. Further, there is no movement of the anti-tip wheel relevant to the drive wheel about the connection at the frame. The drive motor in Furukawa does not create a moment about a pivot that causes the rear caster wheels to lift (or otherwise move). Manifestly, Furukawa does not disclose each of the elements in the claims as pending in the application. Moreover, there is nothing in Furukawa to suggest the operation of the claimed wheelchair.

Schaffner is cited in the office action merely as showing a shell covering the upper portion of a frame. It is admitted that this Schaffner reference discloses this particular structure. However, Schaffner does not further suggest the presently claimed combination, whether taken alone or in combination with Furukawa. Schaffner shows front anti-tip wheels positioned off the ground. More to the point, the anti-tip wheels, which are connected to the motors and drive wheels, are projected forward of the wheelchair frame. Even if there was a suggestion to substitute caster wheels that ride on the ground for the raised anti-tip wheels in Schaffner, there is no suggestion to position these ground engaging, anti-tip casters at the rear of the wheelchair frame. Also, even though Furukawa shows rear caster wheels positioned on the ground that are connected to motors and drive wheels, such does not complete the suggestion of the claimed invention. Furukawa does not use motor torque to raise (or lower) the rear anti-tip wheels and does not suggest its modification to do so. Thus, even considering the additional teachings of Schaffner, the specifically claimed combination in

the above amended claims is not suggested by Furukawa or Schaffner. To create the presently claimed invention, substantial reconstruction of the Furukawa and Schaffner references would be required, and there is no suggest to make those modifications.

Finch is cited in the office action as showing springs to direct the drive wheels toward the ground and as showing a crossbar for supporting two caster wheels as part of the suspension of the vehicle. However, Finch does not suggest or disclose the connection between caster wheels and the drive wheel so as to transfer the moment caused by motor torque to raise (or lower) the anti-tip caster wheels. Thus, to the extent that Finch shows one or more elements of the claims, it does not suggest or disclose the features of the claimed invention that are missing from Furukawa, and that are not further suggested by Schaffner. As such, Finch does not render obvious the specifically claimed combination.

It is respectfully submitted that the claims, as amended above, are not suggested or disclosed by the references cited in the office action or otherwise made of record in the prosecution of this application. The claims are considered to be in condition for allowance. Withdrawal of the present rejections and the issuance of a notice of allowance are respectfully solicited.

If minor amendments are desired in order to place the application in condition for allowance,
the examiner is invited to contact the undersigned by phone.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'TJ Durling', with a long horizontal flourish extending to the right.

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